Description

FIELD OF THE INVENTION

The present invention relates to a new and improved modification for combining a **drill press** and a **wood lathe** into one machine. Further, the present invention relates to an accessory kit, which adds stand-by wood lathe functions to a conventional drill press.

General-purpose drill presses are very widely used in many home workshops because of its universal usage. A drill press usually consists of a column with a base end and a free end; the base end affixed to a base plate to provide stability to the machine, the free end supports a power head of the machine that includes an electrical motor and a belt-pulley for vary the speed settings. A spindle with a chuck is driven by the power source at a high-velocity rotation. A depth feeding handle or wheel is used to drive the spindle in the direction parallel to the column. A drill table is affixed to the column and can be adjusted to different heights.

A wood lathe is a simple machine in which the primary components includes a frame (can be a column set at horizontal position), a headstock with power source and a high-velocity rotating spindle for driving the first end of the wood work piece, a tailstock for supporting the second end of the work piece, a tool rest adjustably mounted on the frame to support a shaping tool (wood chisel).

It has been recognized that these two machines have many common components such as the power source, the machine frame (column) and the control system can be shared with each other. Thus, the drill press represents not only its own characteristics, but also a possible operational use outside its intended functions. The power head of the drill press can itself be used as a headstock. The column can be used as the machine frame of the wood lathe. The drill table can be confined to use as a tailstock. This potential adaptability, combined with the fact it is typically impractical from an economic perspective for DIY people to purchase a general-purpose drill press and a wood lathe for the purpose of occasional wood carving, has given rise to significant demand for a **drill press/wood lathe two-in-one machine** combining the functions of these two mostly-used machines with minimal assembly and low cost.